

ABB BALDOR RELIANCE III

Customer information packet CEM2539T-G

40HP, 1770RPM, 3PH, 60HZ, 324TC, OPSB, F1

Specifications

Enclosure	OPSB
Frame	324TC
Frame Material	Steel
Frequency	60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	40.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	CSA CSA EEV NEMA PREMIUM UR
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	99.000 A @ 208.0 V 98.000 A @ 230.0 V 49.000 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	94.1 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	49.0 a
Insulation Class	H

Part Detail

Revision	E
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	40WGX166
Layout	40LY-000-045
Eff. date	06-27-2024
CD Diagram	CD0005
Poles	04
Leads	9#8
Proprietary	False
Created date	09-23-2019

Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	4064M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	27.19 IN
Power Factor	82
Product Family	General Purpose
Pulley Face Code	C-Face
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	2.125 IN
Shaft Ground Indicator	Shaft Grounding
Shaft Rotation	Reversible
Speed	1770 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP3554LUA											
CAT.NO.	CEM2539T-G			P/N						ENCL	OPSB
SPEC.	40-0000-0101	CC	010A	FRAME		324TC	SER.NO.				
HP	40	CLASS		H	HZ	60					
RPM	1770	PH	3	DES		A					
VOLTS	230/460	CODE		H	ODE BRG	6309	DE BRG	6312			
AMPS	98/49										
RATING	40C AMB-CONT	NEMA-NOM-EFF			94.1	GREASE	POLYREX EM				
PF	82	SER.F.	1.15	CT30-60(2:1) VT3-60(20:1)							
USABLE AT	N/A										
HTR-VOLTS	HTR-AMPS	MAX. SPACE HEATER TEMP.									

AC Induction Motor Performance Data

Record # 35574

Typical performance - not guaranteed values

Winding: 40WGX166-R003				Type: 4064M		Enclosure: OPSB		
Nameplate Data				460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		40		Full Load Torque		119 LB-FT		
Volts		230/460		Start Configuration		direct on line		
Full Load Amps		98/49		Breakdown Torque		427 LB-FT		
R.P.M.		1770		Pull-up Torque		187 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		246 LB-FT		
NEMA Design Code		A	KVA Code	Starting Current		330 A		
Service Factor (S.F.)		1.15		No-load Current		21.1 A		
NEMA Nom. Eff.		94.1	Power Factor	82		Line-line Res. @ 25°C		0.16236 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		41°C		
S.F. Amps				Temp. Rise @ S.F. Load		51°C		
				Locked-rotor Power Factor		32		
				Rotor inertia		5.09 LB-FT2		

Load Characteristics 460 V, 60 Hz, 40 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	43	65	76	82	85	85	84
Efficiency	91.1	94	94.5	94.2	93.6	92.8	93.8
Speed	1792.4	1785	1777.8	1770.2	1762.1	1752.8	1765
Line amperes	24.1	30.7	39.2	48.7	59.3	71.3	55.1

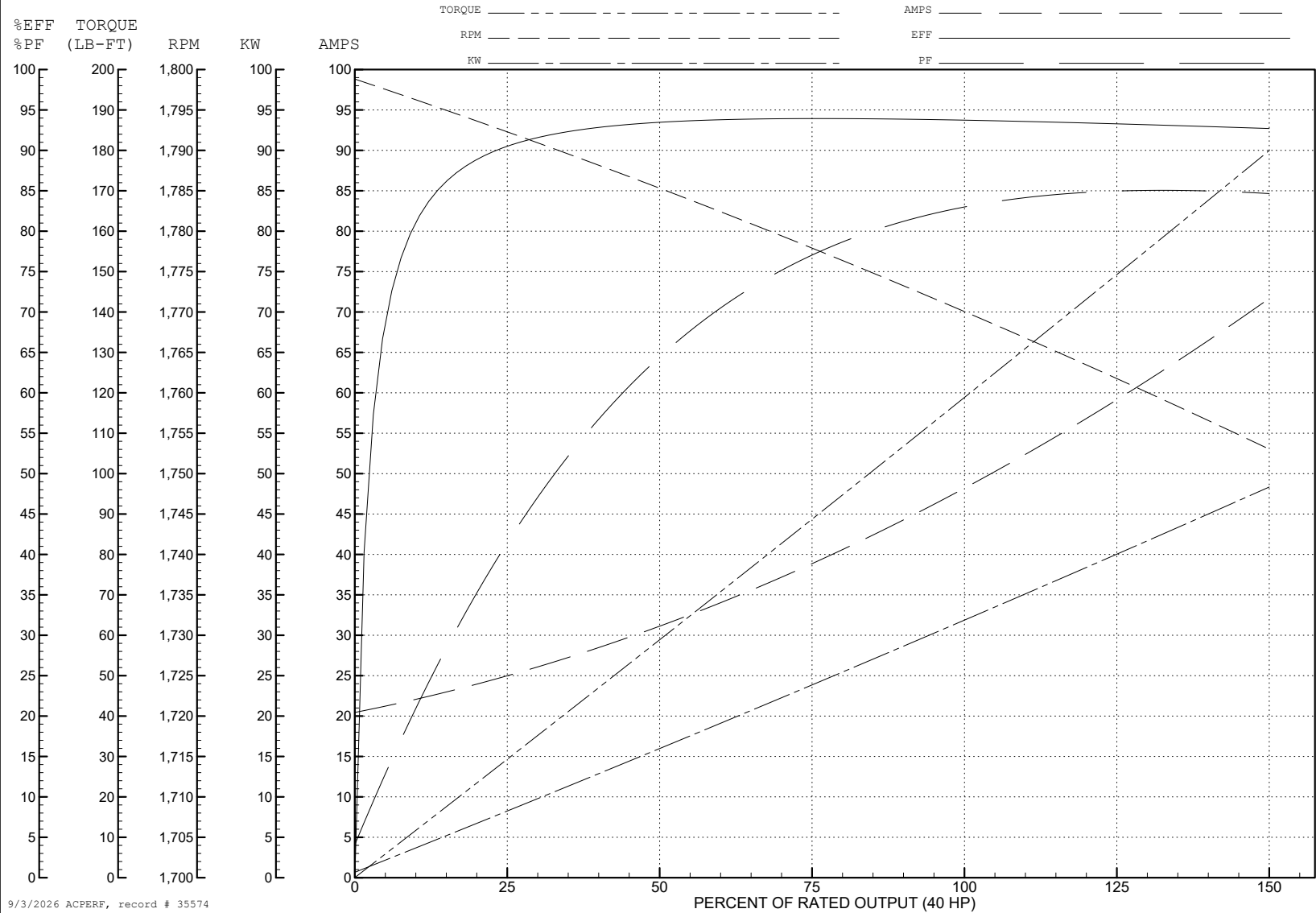
ABB Motors and Mechanical Inc.

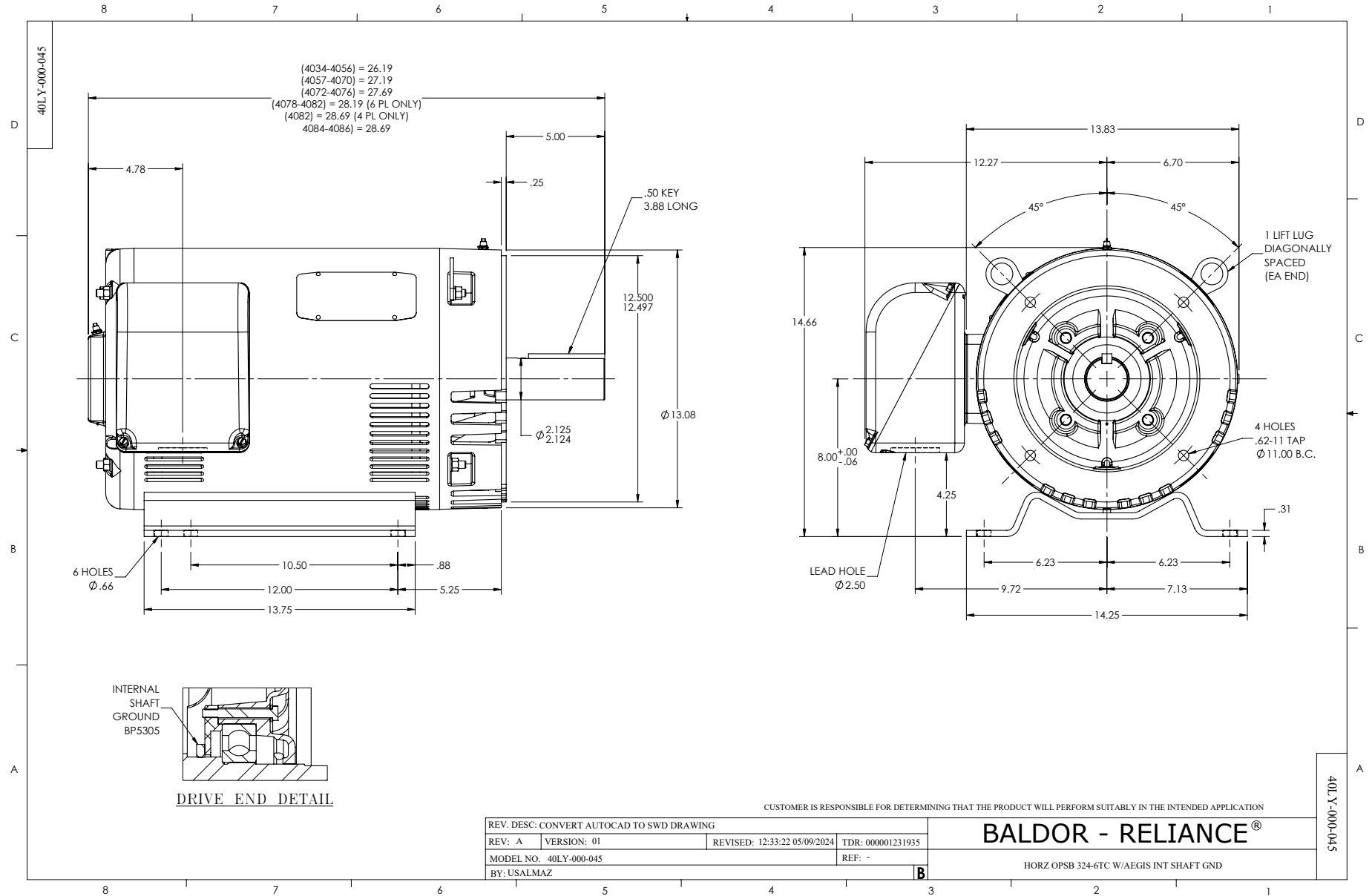
WINDING # 40WGX166

Typical performance - not guaranteed values.

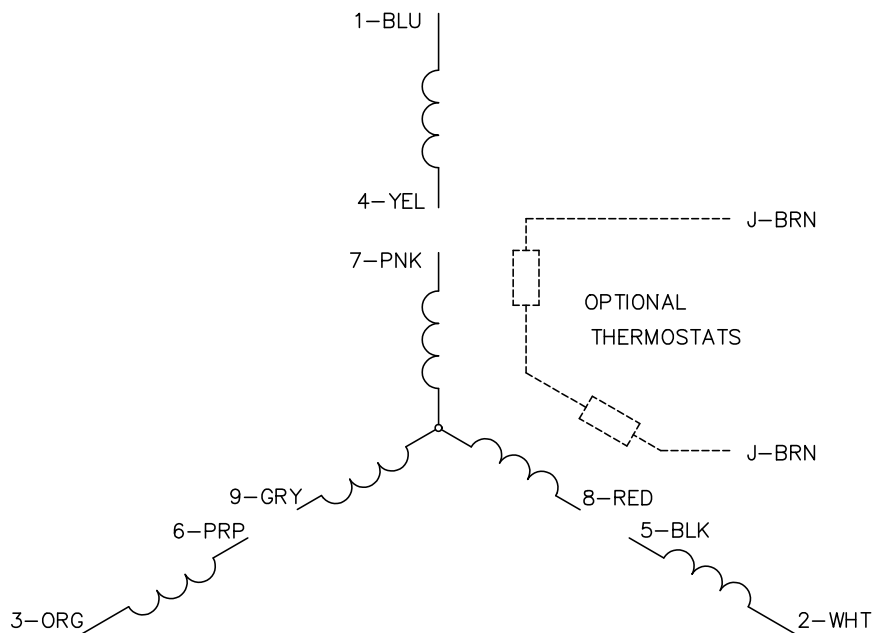
40 HP 3 PH 60 HZ 1770 RPM 460 V 4064M

TORQUES (LB-FT): PO=427 PU=187 LR=246 LRA=330

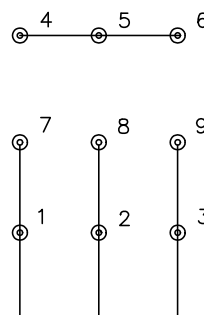




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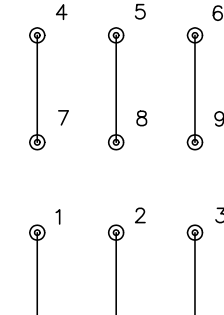


LOW VOLTAGE
(2Y)



LINE

HIGH VOLTAGE
(1Y)



LINE

NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS

REV. LTR: E BY: JLP REVISED: 01/19/99 10:15 TDR: 0171435

900000

FILE: AAA00005140

MDL: -

MTL: -

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005